



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/745,387

12/21/2000

David R. Oran

2705-126

1119

7590

05/10/2005

Marger Johnson & McCollom, P.C.  
1030 SW Morrison Street  
Portland, OR 97205

EXAMINER

SEFCHECK, GREGORY B

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 05/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/745,387

Applicant(s)

ORAN, DAVID R.

Examiner

Gregory B. Sefcheck

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

- Applicant's Amendment filed 12/16/2004 is acknowledged.
- Claims 1, 2, 10, 13, 14, 24, 36, and 37 have been amended.
- Claims 1-47 remain pending.

### ***Claim Objections***

1. Claim 47 is objected to because of the following informalities:

Claim 47 is drawn to "a system according to claim 24". However, claim 24 is drawn to "electronic storage medium containing software used for controlling a VOIP call". It would appear claim 47 should depend from claim 36 or 37, which are drawn to systems.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2662

3. Claims 1, 2, 4, 6-10, 12-15, 17-25, 27, 29-33, 35-37, 39, 41-45, and 47 are rejected under 35 U.S.C. 102(e) as being anticipated by Kung et al. (US006775267B1), hereafter Kung.

- In regards to Claims 1, 10, 13, 14, 24, 33, 36, and 45,

Kung discloses a method and software for controlling a voice-over-IP (VOIP) call system (Figs. 1-4; Col. 7, lines 15-25; Col. 8, lines 9-13; claim 1,10,24,36 – method, system, and electronic storage medium having software for controlling a VOIP call).

Kung shows that VOIP call packets traveling through the IP network may be given a priority to maintain certain QoS requirements (Col. 7, lines 21-25; claim 1,10,24,36 – tracking adaptation schemes used for transmitting packet in a VOIP call).

Kung discloses the ability to change quality of service, required bit rate, priority, etc. in real time in response to user input (Col. 7, lines 27-30; claim 1,10,13,24,36 – monitoring a user response/input that requests a different level of user perceived sound quality for the VOIP call; claim 1,10,13,24,36 – dynamically varying the adaptation schemes used for transmitting the packets in the call to correspond with the requested level of quality).

Kung further discloses that the real time changes to the VOIP call may be flexibly performed with regard to congestion in the network (Col. 7, lines 30-35; Col. 17, lines 55-59; claim 10,14,33,45 – monitoring congestion in a network used for conducting the call and varying adaptation schemes according to the user response and the monitored congestion).

- In regards to Claims 2, 15, 25, and 37,

Kung discloses a method and software for controlling a voice-over-IP (VOIP) call system that covers all limitations of the parent claims. Limitations of claim 37 similar to claim 36 are also covered above.

Kung discloses that calls may be initially conducted at a user's default settings of quality, cost, etc. (Abstract; Col. 28, lines 12-19; claim 2,15,25,37 – initially transmitting packets of VOIP call using best effort).

The call settings may then be dynamically altered based on user input, requiring a call manager to reserve the necessary resources (Col. 30, lines 25-30; claim 2,25,37 – monitoring the user response for a request to increase sound quality; claim 2,15,25,37 – requesting reservation of resources during the call when the increased sound quality request is detected prior to the reserved resources being used during the call and without necessarily using the entire requested resources during the call).

- In regards to Claims 4, 17, 27, and 39,

Kung discloses a method and software for controlling a voice-over-IP (VOIP) call system that covers all limitations of the parent claims.

Kung shows that user input for changing the call quality may be performed before as well as during the call (Col. 7, lines 27-35; Col. 30, lines 25-30; claim 4,17,27,39 – conducting the already established call using reserved resources when the reservation request is accepted and the user response requests additional increases in sound quality).

- In regards to Claims 6, 8, 19, 29, 31, 41, and 43,

Kung discloses a method and software for controlling a voice-over-IP (VOIP) call system that covers all limitations of the parent claims.

Kung discloses changing call parameters is accomplished through user input on a user device, such as the screen portions shown in Figs. 7-9. Kung discloses that user input may be collected via touchscreen (graphical user interface; Col. 20, lines 51-55; claim 6,29,41 – using a signal generated by an input device to detect the user response during the call; claim 8,19,31,43 – using a graphical user interface as the input device).

- In regards to Claims 7, 9, 18, 21, 30, 32, 42, and 44,

Kung discloses a method and software for controlling a voice-over-IP (VOIP) call system that covers all limitations of the parent claims.

Telephone units are also shown to be connected to the system for use as an input device by the user, including DTMF sensing logic (Fig. 3; Col. 23, lines 45-51; claim 7,18,30,42 – including using a dial or buttons on a telephone as the input device; claim 9,21,32,44 – including decoding DTMF signals to detect the user response).

Art Unit: 2662

- In regards to Claims 12, 20, 35, and 47,

Kung discloses a method and software for controlling a voice-over-IP (VOIP) call system that covers all limitations of the parent claims.

Referring to Fig. 9B, Kung shows that user input for changing call parameters may include cost icons (claim 12,20,35,47 – detecting a user response selecting a cost for the VoIP call and varying the adaptation schemes according to the selected cost).

- In regards to Claims 22 and 23,

Kung discloses a method and software for controlling a voice-over-IP (VOIP) call system that covers all limitations of the parent claims.

Referring to Figs. 7-9, Kung shows that user input determines how much the call parameters are varied (claim 22 – user response determines how much the adaptation parameters are varied).

Kung discloses that data rate is one of the call parameters that may be varied in response to user input (Abstract; Figs. 7b and 9c; Col. 7, lines 25-30; claim 23 – varying the rate packets are transmitted and received during the call).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 16, 26, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kung in view of Karagiannis (US 20020015395A1).

- In regards to Claims 3, 16, 26, and 38,

Kung discloses a method and software for controlling a voice-over-IP (VOIP) call system that covers all limitations of the parent claims.

Kung does not explicitly disclose utilizing an RSVP request during the call to request reservation of resources.

Karagiannis discloses a method and system for interoperability between mobile IP and RSVP during route optimization. Karagiannis shows that the RSVP protocol, including request messages, can be used to reserve resources for a packet-data session according to quality of service requirements (Pg. 2, paragraphs 21-23; claim 3,16,26,38 – requesting reservation of resources comprises making RSVP request during the call).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize RSVP requests for reserving resources, as shown by Karagiannis, during a VOIP call in the system of Kung. This modification would enable a bandwidth reservation request for the call to specify certain quality of service requirements needed to improve the sound quality solicited by a user in Kung.



6. Claims 5, 11, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kung in view of Havens (US006735175B1).

- In regards to Claims 5, 11, and 28,

Kung discloses a method and software for controlling a voice-over-IP (VOIP) call system that covers all limitations of the parent claims.

Kung does not explicitly disclose increasing voice coder performance or reducing payload size after the resources are reserved.

Havens discloses changing quality of service for voice over IP calls. Havens shows that implements requested changes to quality of service by adjusting performance of the codec module (Fig. 2; Abstract; Col. 2, lines 31-43; Col. 4, lines 23-30; claim 5,28 – increasing voice coder performance or reducing payload size after the resources are reserved; claim 11 – varying codecs used for encoding audio signals into digital data making up the packets).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method and system of Kung by adjusting coder performance in response to user requested change in quality of service, as shown by Havens. This would enable quality of service to be dynamically adjusted during a call without requiring changes to the bandwidth of the call.

7. Claims 34 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kung in view of Havens as applied to claim 11 above, and further in view of Hardie et al. (US006675340B1), hereafter Hardie.

- In regards to Claims 34 and 46,

Kung discloses a method and software for controlling a voice-over-IP (VOIP) call system that covers all limitations of the parent claims. Kung further discloses that a change in data rate may be performed in response to user input (Abstract; Figs. 7b and 9c; Col. 7, lines 25-30; claim 34,46 – varying the rate packets are transmitted and received during the call).

Kung does not explicitly disclose varying codecs used for encoding audio signals into digital data making up the packets, varying an amount of audio data in the audio packets and adding or removing error correction information from the audio packets.

Havens discloses changing quality of service for voice over IP calls. Havens shows that implements requested changes to quality of service by adjusting performance of the codec module and the amount of data sampled for packet production (Fig. 2; Abstract; Col. 2, lines 1-11 and 31-43; Col. 4, lines 23-30; claim 34,46 – varying codecs used for encoding audio signals into digital data making up the packets; claim 34,46 – varying an amount of audio data in the audio packets).

Hardie discloses FEC for packetized data networks. Hardie shows that the amount of error correction sent with a packet is dependent on the quality measure

Art Unit: 2662

required for the link (Abstract; Hardie claim 10; claim 34,46 – adding or removing error correction information from the audio packets).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method and system of Kung by varying codecs used for encoding audio signals into digital data making up the packets and/or varying an amount of audio data in the audio packets, as shown by Havens, and adding or removing error correction information from the audio packets, as shown by Hardie. Each of these actions, performed alone or in combination, would enable an improvement in quality of service for a VOIP call without requiring changes to the bandwidth allocated to the call and elsewhere within the system.

8. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kung in view of Karagiannis as applied to claim 38 above, and further in view of Havens.

- In regards to Claim 40,

Kung discloses a method and software for controlling a voice-over-IP (VOIP) call system that covers all limitations of the parent claims.

Kung does not explicitly disclose increasing voice coder performance or reducing payload size after the resources are reserved.

Havens discloses changing quality of service for voice over IP calls. Havens shows that implements requested changes to quality of service by adjusting performance of the codec module (Fig. 2; Abstract; Col. 2, lines 31-43; Col. 4, lines 23-

Art Unit: 2662

30; claim 40 – increasing voice coder performance or reducing payload size after the resources are reserved).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method and system of Kung by adjusting coder performance in response to user requested change in quality of service, as shown by Havens. This would enable quality of service to be dynamically adjusted during a call without requiring changes to the bandwidth allocated to the call and elsewhere within the system.

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 1-47 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Kamani et al. (US 20040179515A1) discloses a method and apparatus for providing a configurable quality of service threshold for voice over internet protocol
- Tuomi (US 20020110112A1) discloses a system and method for managing a network to sustain the quality of voice over internet protocol communications

- Lamarque, III et al. (US006690651B1) discloses a method and apparatus for automatic transfer of a call in communications system in response to changes in quality of service
- Murphy et al. (US006282192B1) discloses a PSTN fallback using dial on demand routing scheme

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory B. Sefcheck whose telephone number is 571-272-3098. The examiner can normally be reached on Monday-Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GBS  
5-2-2005



HASSAN KIZOU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600